Development for Economic Growth

Activity:	Assistance and Advisory Services for Energy Sector Transformation
Location:	Worldwide
Problem:	Skillful delivery of energy services requires the recognition that energy is an economic commodity as well as a public good. It is, therefore, subject to the rules of the marketplace and, as such, requires healthy markets in which to function.
Solution:	Work with the public sector, private sector, and civil society separately and in combined forums to increase the ability of governments to be accountable to its citizens, and to balance the need for economic and technical efficiency in the energy sector with its social obligations. Implementation focuses on promoting transparency in the formulation, promulgation and implementation of rules, regulations, and technical standards, establishing independent regulatory systems, increasing the ability of counterparts to adopt market oriented economic systems, and increasing the ability of the public to understand the market approach to provision of energy services and to effectively participate in it.
Duration:	9/30/04 – 9/29/09
Implementer:	CORE International Inc.

Objective

The object of this activity is to develop energy markets and make them sustainable in order to foster economic growth and social wellbeing.

Background

Access to reliable, affordable energy is an essential input to economic growth. Agriculture, manufacturing, shops, trading, transportation, and construction are all engines of economic growth and all require energy to function efficiently. The absence of reliable, affordable and environmentally benign energy sources--energy poverty--prevents billions of people from improving their lives through the increased productivity, mobility and higher value-added economic activity that energy can enable. Countries with a significant level of energy poverty are unlikely to be able to participate fully and fairly in the global economy. Despite the importance of modern energy to economic growth, over 2 billion people worldwide still live without the benefit of commercial energy sources. In southern Africa, 75 percent of the region's population still relies on wood fuel as their main source of energy. In addition, energy services in many developing countries are characterized by frequent blackouts and poor quality of service.

Energy poverty cannot be sustainably addressed in the absence of strong energy markets and many developing and transition countries do not have such markets. Smart delivery of energy services requires the recognition that energy is not just a public good but also an economic commodity that is subject to the supply and demand rules of the marketplace. Political interventions can temporarily alter the dynamics of supply, demand, and access to energy services, but unwise and untargeted political interventions without clear exit strategies distort the sector leading to inefficiencies that are not sustainable.

As developing country governments reorganize their energy sectors they are learning that private sector investors, project developers and financial intermediaries require measures to mitigate the political and economic risks inherent in any economic activity. Governments are facing the fact that in many cases, the energy sector is inherently political. Political parties have used access to under-priced electricity and gasoline as tools for exercising political power. Revenues from national utilities and oil companies have been used by governments to finance political activities and to augment personal bank accounts. Energy sector employees have exploited the inefficiencies of the sector to enrich themselves. People have come to expect very low-cost, or free, electricity and/or gasoline. When governments have undertaken reform efforts and raised prices without addressing these inefficiencies, civil strife has resulted.

Strong energy markets have three dimensions. The first dimension refers to supply of energy: Strong energy markets are characterized by energy companies that run their businesses as commercial enterprises (e.g., modern management structures; the establishment of separate cost centers, putting in place international accounting standards, and standard billing and metering systems).

The second dimension refers to the public policy and financial environment under which private and public energy companies operate. Strong energy markets operate under sensible energy laws, an autonomous regulatory body, an adequate financial sector, and a fair judicial system.

The third dimension refers to the demand side of the equation: Strong energy markets are characterized by citizens with access to decision-making processes. These markets have customers that are well-informed and who can effectively and constructively communicate their concerns to governments and energy service providers. They also have customers who understand the commercial nature of energy provision and use and who have developed consistent payment habits.

Activities

1. Private Sector Participation in the Southern Africa Power Pool

There are four legal documents that govern SAPP. These are the Inter-governmental Memorandum of Understanding (IGMOU), the Inter-utility Memorandum of Understanding (IUMOU), the Agreement Between Operating Members (ABOM) and the Operating Guidelines (OG). The objective of this subtask is to assist SAPP in reviewing and revising the documents together with SAPP stakeholder utilities and to make recommendations for changing the base documents to allow full private sector participation in the power pool.

The IUMOU and OG have been submitted and accepted by the SAPP. The ABOM is currently being reviewed.

2. Regulating Rural Electrification (Zambia)

The objective of this work is to build capacity within Zambia's Energy Regulatory Board (ERB) so that it can function more effectively as Zambia's autonomous energy regulatory body, especially as it relates to encouraging rural electrification, and provide a jump start to the country's rural electrification.

USAID assistance focused on: (1) helping ERB and the newly formed Rural Electrification Authority (REA) to see their common purpose and yet differing roles; (2) assisting the ERB in determining the role and scope of regulation in rural electrification including defining the procedures and principles for tariff setting for off-grid networks and projects; and

(3) illustrating how regulation can reduce cost and risk in rural electrification.

The project produced a thorough manual for regulation which the ERB has accepted and is in the process of implementing.

3. New Approaches to Planning Rural Electrification (Zambia)

The objective of this work was to provide the REA with alternative way of selecting and prioritizing rural electrification projects, particularly off-grid projects, and to provide the first part of a rural electrification master plan.

USAID assistance helped the REA to:

- Gather all resource assessment studies and data relevant to rural electrification projects in Zambia.
- Develop a methodology to prioritize areas based on supply potential using rapid appraisal techniques and apply it as appropriate and possible.
- Develop a methodology to rapidly assess and prioritize demand centers.
- Determine the data requirements and apply the methodology to the extent possible.

The project has developed a methodology and manual incorporating the techniques of rapid assessment to provide the REA with a quick and cost-effective tool to select and prioritize projects. Additionally, the project selected, then trained, REA staff on two publicly available models that will be used for rapid assessment, which assists REA in developing rural electrification projects in a fashion that builds on integrated rural development.

4. Establishing a Fuel Cost Pass-Through Mechanism (Rwanda)

The objective of this work was to build capacity within Rwanda Utility Regulatory Agency (RURA) and to help the country meet a critical World Bank loan conditionality in the process.

USAID provided a tariff expert that worked with RURA and the Utility to determine how and what data should be collected; provide a methodology for an automated fuel pass-through mechanism; and carryout an analysis in support of the mechanism. This expert worked alongside RURA and utility staff in an on-the-job training exercise.

Results

The activities have built decision making capacity in the Zambian Energy Regulatory Board, the Zambian Rural Electrification Authority, and the Rwandan Utility Regulatory Agency.

The Zambian ERB now has definitive measures for regulation that, when adopted, will result in lower cost for rural electrification and it has provided measures to protect investment and reduce risk.

The Zambian Rural Electrification Authority has learned and adopted new tools that will allow it to rapidly collect data and perform analyses for project selection and ranking. Moreover the process will help strengthen ties between communities and those seeking to supply rural power.

The Rwandan energy regulator was able to meet a critical World Bank conditionality so that an emergency $25 million loan could be released.

The Southern Africa Power Pool will be open to private sector members and thereby increase the opportunities for electricity trade and lower electricity costs.

Development Impact
All of the activities have built the capacity of the host country energy institutions in order to develop more robust energy markets there. As these initiatives are adopted and expanded, energy costs will be reduced and access to modern energy services will be increased.

USAID Contact:
Kevin Warr
Office of Infrastructure & Engineering
+1 202 712 4779
kwarr@usaid.gov

Project Contact:
Vinod Shrivastava
CORE International, Inc.
+1 202 362 9100
vshrivastava@coreintl.com